BookletChart

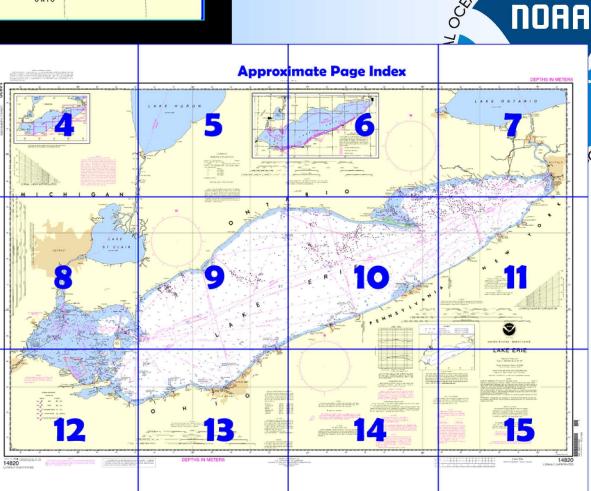
Lake Erie

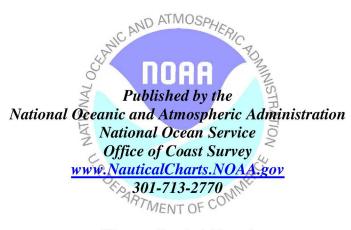
(NOAA Chart 14820)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts
- Compiled by NOAA, the nation's chartmaker.





What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart[™]?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 6, Chapter 6 excerpts]

(8) Lake Erie is the southeasternmost and fourth largest of the five Great Lakes. With a greatest depth of 210 feet, it is the shallowest of the lakes and the only one with a floor above sea level. The deepest part of the lake is generally at the E end, while the island region in the W part of the lake is the shallowest. The lake has an average depth of 62 feet. The lake is fed at the NW end by water from Lake Huron via St. Clair River, Lake St. Clair, and Detroit River. The only

natural outlet of the lake is at the NE end through Niagara River. Welland Canal bypasses the falls and rapids of Niagara River and provides a navigable connection to Lake Ontario.

(624) For about 25 miles W from a line between Point Marblehead on the S shore and Point Pelee on the N shore, Lake Erie is rendered foul by a group of islands and shoals. The main route for large vessels is through

Pelee Passage in the N part of the area, but other passages of limited capacity are also available to the S. Submerged fish net stakes may be encountered throughout the W end of Lake Erie.

(625) The **International boundary** between the United States and Canada extends through this area in a series of straight lines bearing from the E into the NW.

Corrected through NM Oct. 8/05 Corrected through LNM Oct. 4/05

NOTE B

Mariners should use caution as military craft may be operating within the area. For further information consult the U.S. Coast Guard Local Notice to Mariners.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

NOAA WEATHER RADIO BROADCASTS

NOAA WEATHER HADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

| Buffalo,NY | KEB-98 | 162.55 MHz |
|--------------|--------|------------|
| Cleveland,OH | KHB-59 | 162.55 MHz |
| Detriot,MI | KEC-63 | 162.55 MHz |
| Erie,PA | KEC-58 | 162.40 MHZ |
| Sandusky,OH | KHB-97 | 162.40 MHz |
| Toledo,OH | WXL-51 | 162.55 MHz |
| Akron,OH | KDO-94 | 162.40 MHz |

CAUTION

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial

broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

o(Accurate location) o(Approximate location)

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas

Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and subthis chart. Not all submarine pipelines and sub-marine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buows.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

BADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

Note A

Navigation regulations are published in Chapter 2, U.S.
Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Ruffels Navy Cyclestrict Engineer, Corps of Engineers in Ruffels Navy Cycles

Buffalo, New York. Refer to charted regulation section numbers.

Table of Selected Chart Notes

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

MAGNETIC VARIATION

Magnetic variation curves are for 2005 derived from 2005 World Magnetic Model and accompanying secular change. If annual change is in same direction as variation it is additive and the variation is increasing. If annual change is opposite in direction to variation it is subtractive and the variation is decreasing.

NOTE D

Mariners are warned that the numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

LORAN-C

GENERAL EXPLANATION

| LORAN-C FREQUENCY100kHz | |
|---|----|
| PULSE REPETITION INTERVAL | |
| 996099,600 Microseconds | |
| STATION TYPE DESIGNATORS: (Not individual station | |
| letter designators). | |
| M Master | |
| W Secondary | |
| X Secondary | |
| Y Secondary | |
| Z Secondary |] |
| • | IC |
| EXAMPLE: 9960-X | |

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propagation delays. They have not been verified by comparison with survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1280.93). Consult U.S. Coast Pilot 6 for important supplemental

SOURCE DIAGRAM

Most of the hydrography identified by the letter "I" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Other outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. By decrease Berke to Chapter Libed States Coop Blace. diagram. Refer to Chapter 1, United States Coast Pilot.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 and Canadian Sailing Directions, Great Lakes, Vol. 1 for important supplemental information. Information concerning Canadian Nautical Charts, Sailing Directions, Tide Tables, and other Government publications of interest to mariners may be obtained on request from the Dominion Hydrographic, Canadian Hydrographic Service, Department of Fisheries and Ocean, Ottawa.

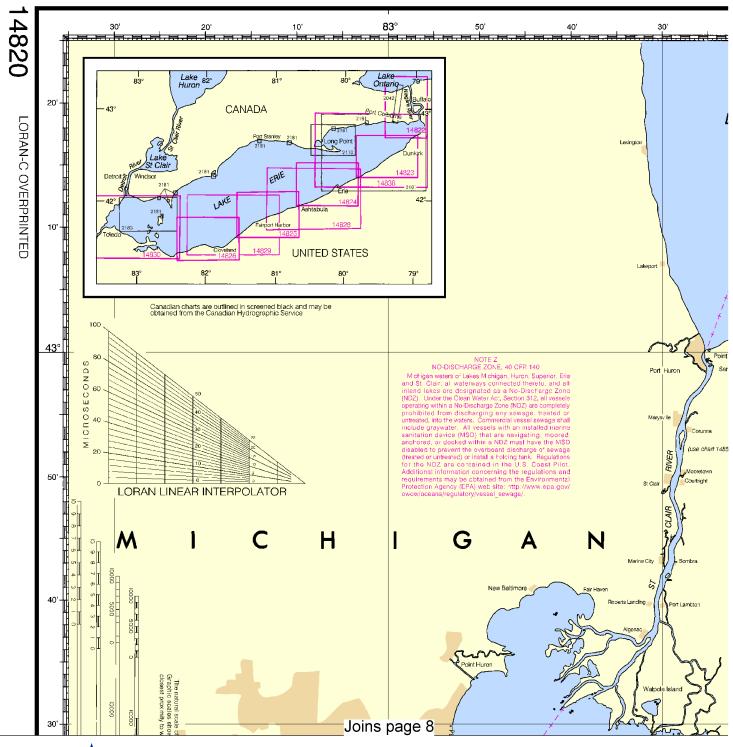
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

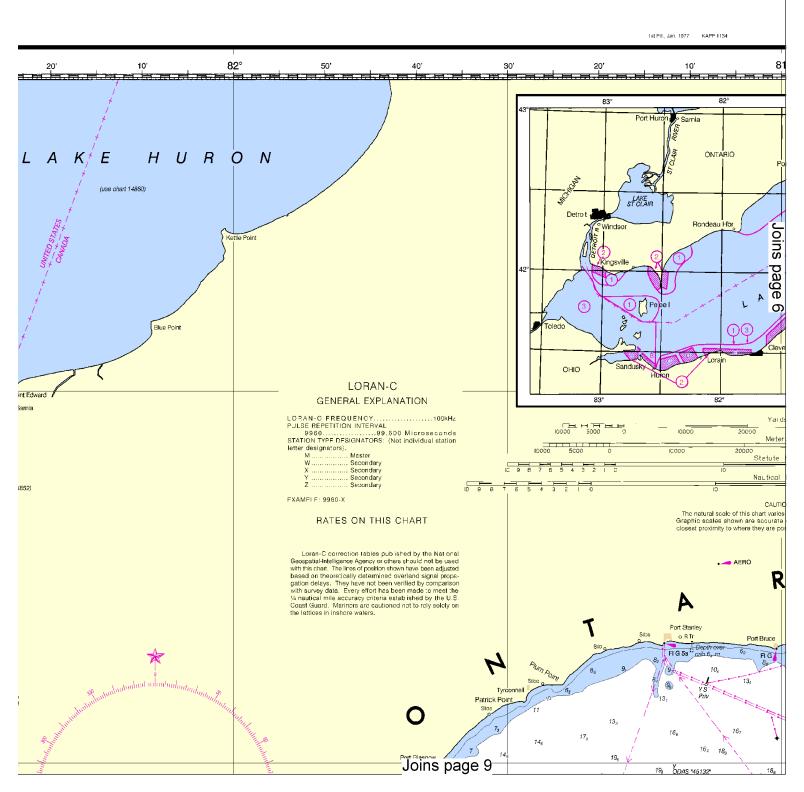
SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles (St M) and nautical miles (MM) between points of departure. The true bearing between any two points on this chart may be determined by connecting the two points with a straight line and measuring the angle of its intersection with a meridian line.

PRINT-ON-DEMAND CHARTS

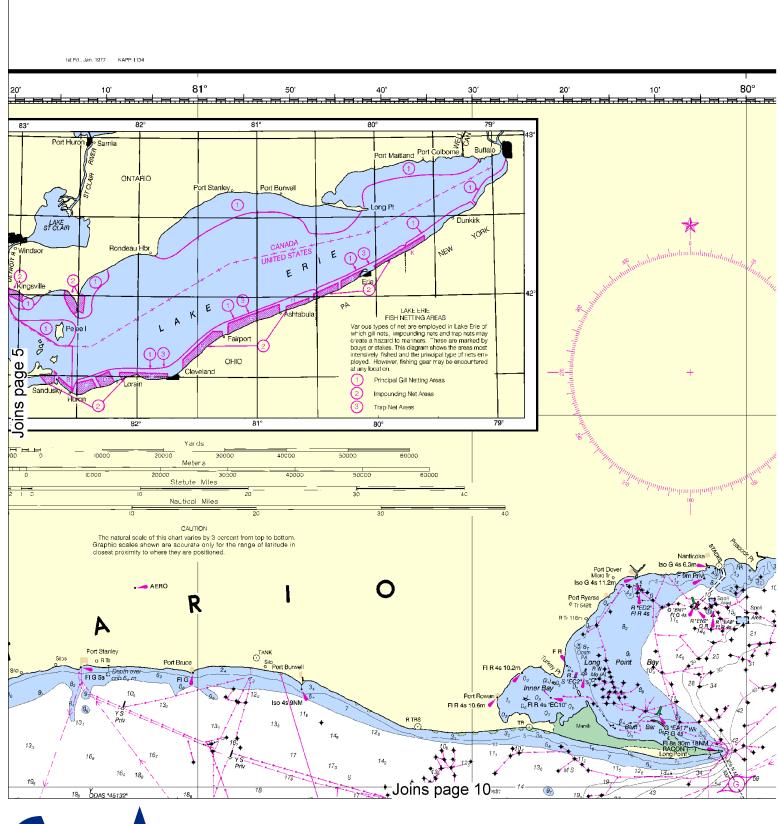
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and tical corrections. Charts are printed when ordered using Print-on-Demand technology. New Edit ons are evailable 5.8 wocks before thoir rologos are traditional NOAA charts. Ask your chart agont about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://dauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com. or help@OceanGrafix.com.







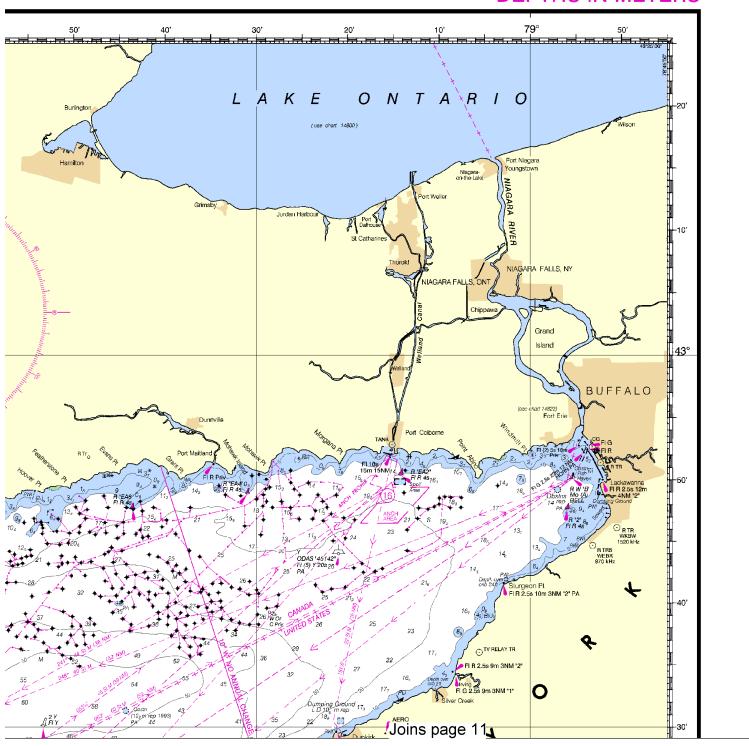
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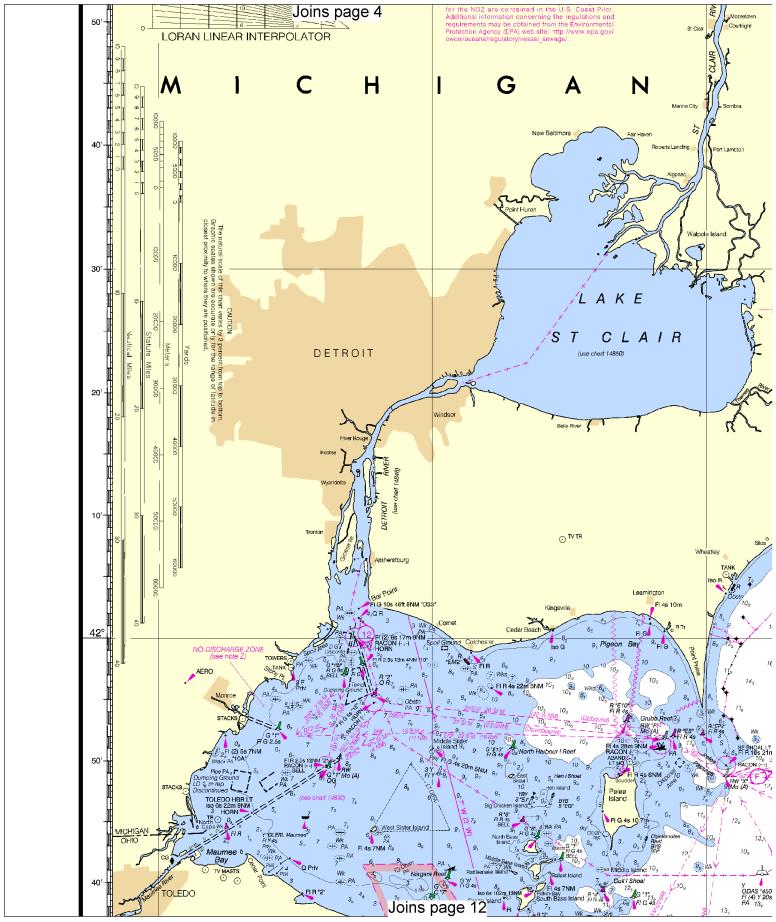
DEPTHS IN METERS



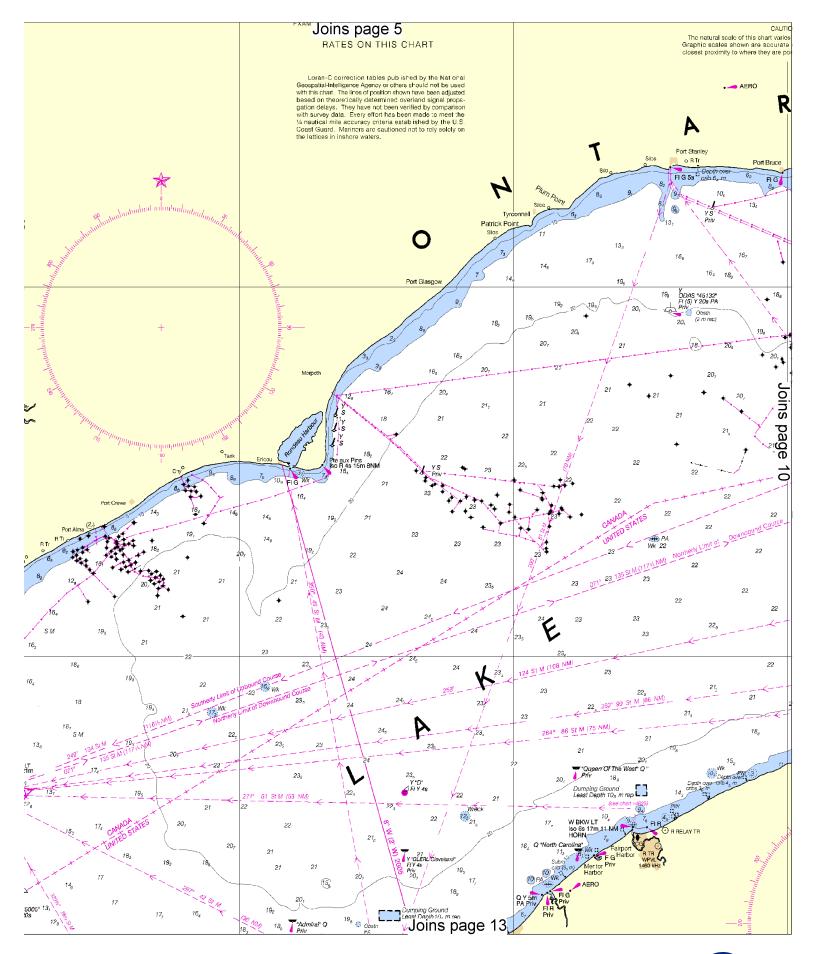
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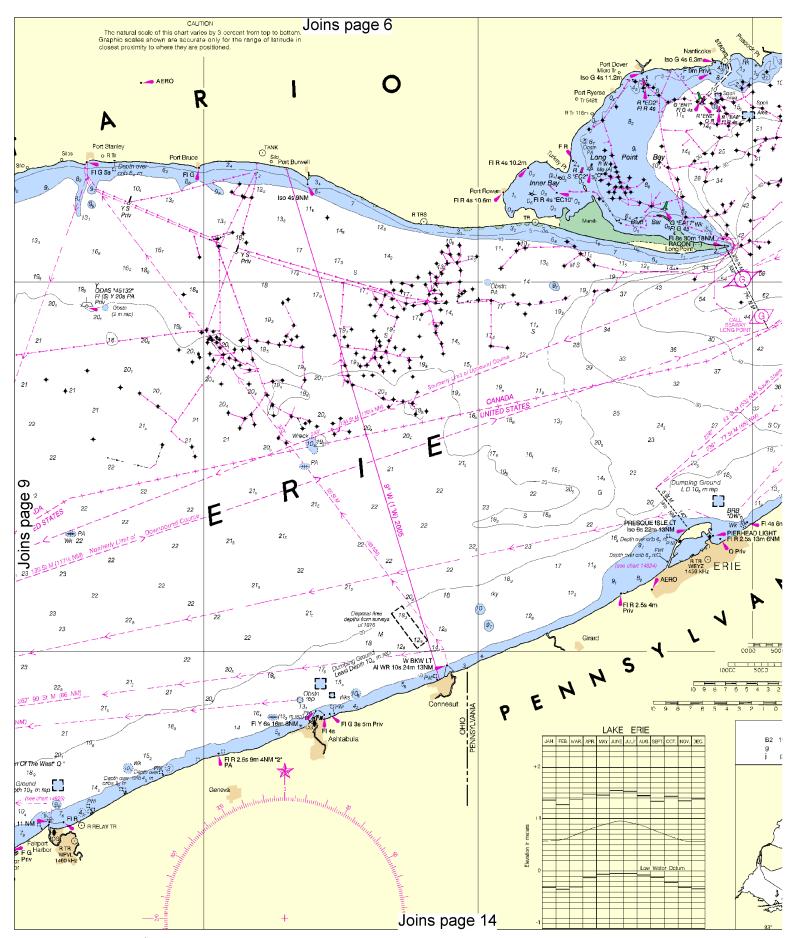
NGA Weekly Notice to Mariners: 0910 2/27/2010,

Canadian Coast Guard Notice to Mariners: 0110 1/29/2010.



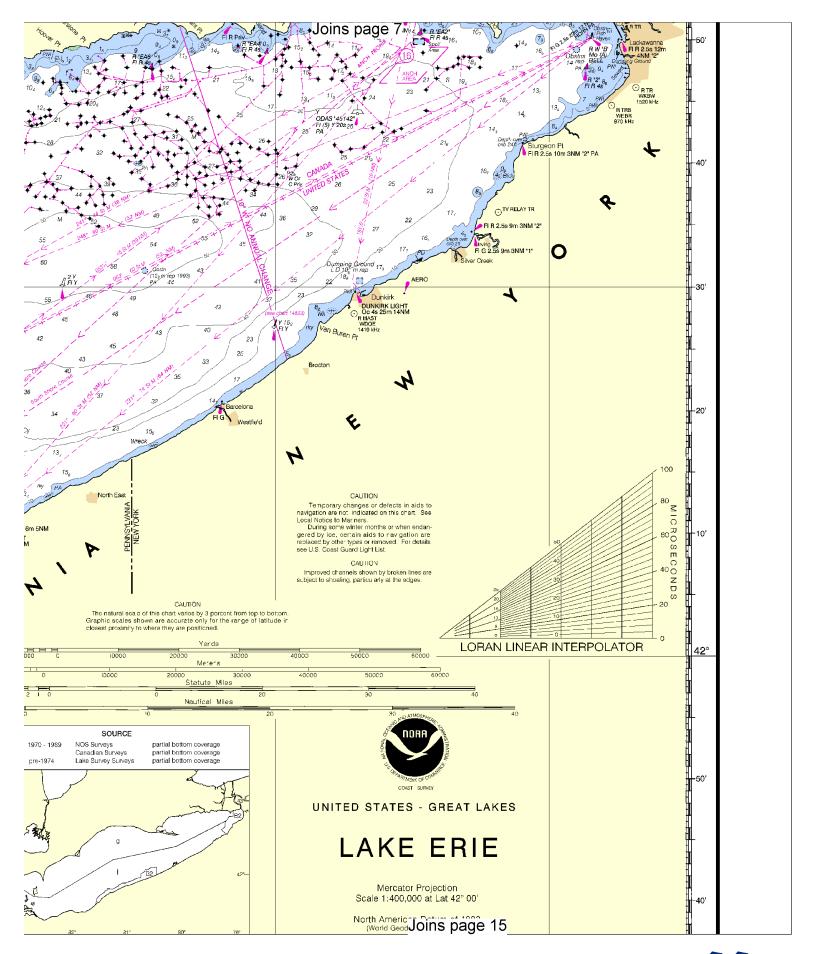


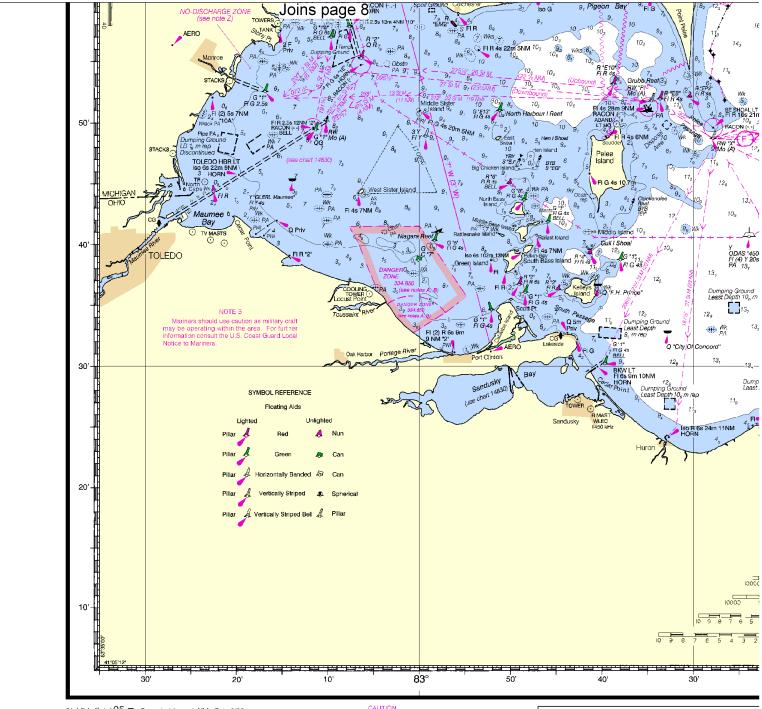










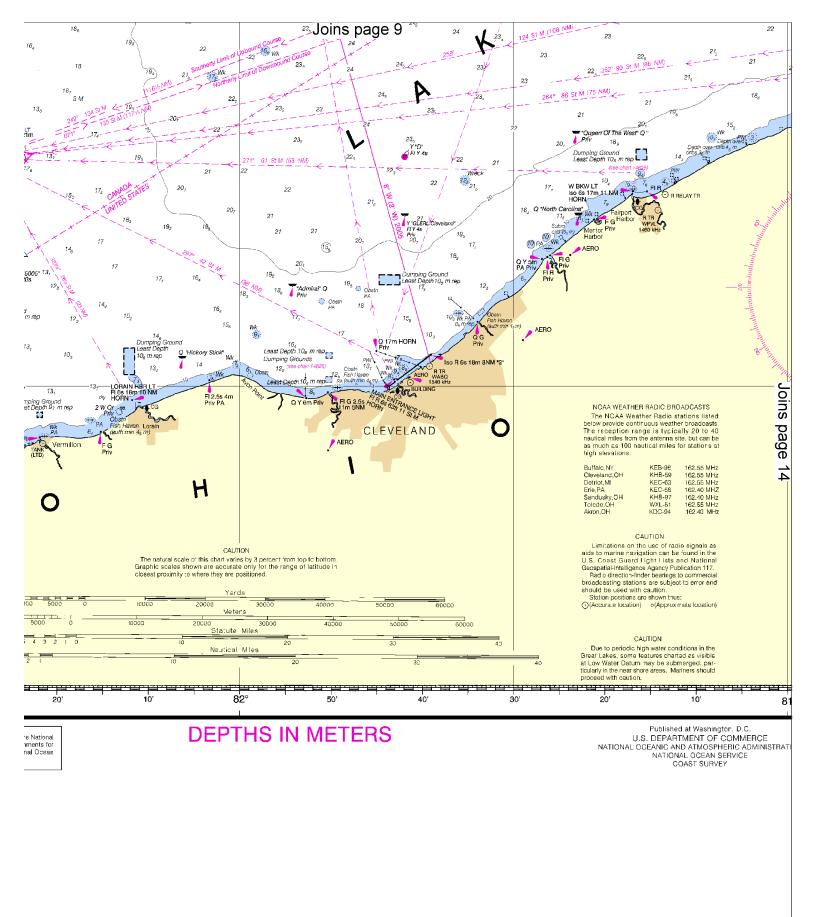


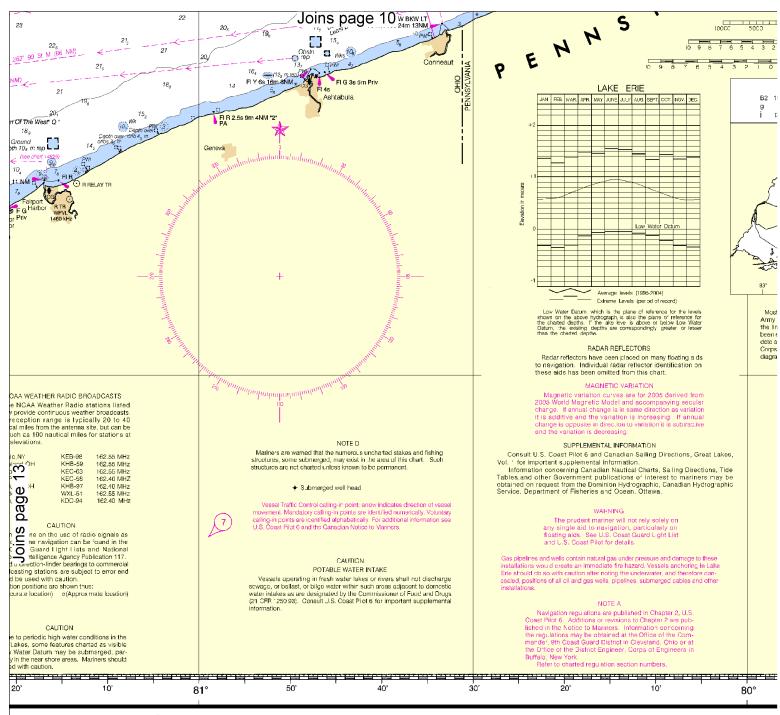
21st Ed., Oct. / 05
Corrected through NM Oct. 8/05
Corrected through LNM Oct. 4/05
Corrected through LNM Oct. 4/05
LORAN-C OVERPRINTED

This chart has been corrected from the Notice to Marine's (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LIM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

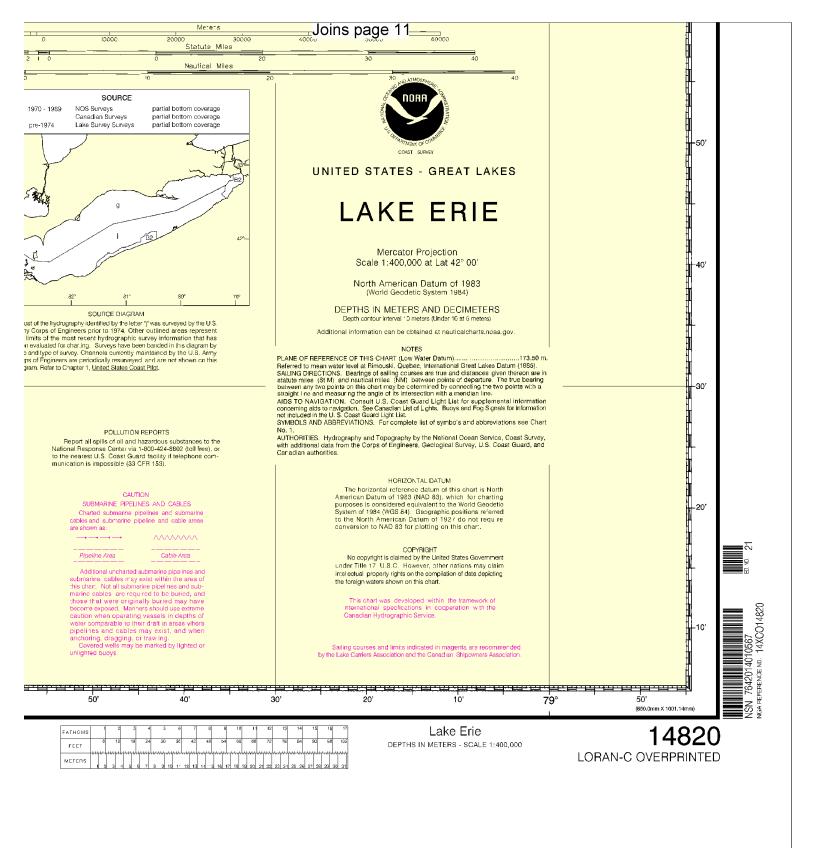
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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue – 216-902-6117 Coast Guard Search & Rescue – 716-843-9527 Coast Guard Search & Rescue – 313-568-9525 Canadian Coast Guard (RCC Trenton) – 1-800-267-7270 or 613-965-3870

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts — These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) -

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNCs[™]) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketChartsTM – PocketChartsTM are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.Noa.gov, <a href="